

Date: Wed, 19 May 93 15:06:17 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #607  
To: Info-Hams

Info-Hams Digest                      Wed, 19 May 93                      Volume 93 : Issue    607

Today's Topics:

    3rd Party Vendors of HT batteries  
    Alinco DJ580 Gets HOT!!! (2 msgs)  
        ARRL Bulletin 55 ARLB055  
    Don't get ripped off by a G5RV (4 msgs)  
        MININEC  
    Mobile antenna mount question  
    Radio Shack 70cm HT? (2 msgs)  
        Signal report etiquette  
    SPECTRUM COMMUNICATIONS. NORRISTOWN PA  
        Still 8 weeks for license  
    What is circular polarization? (3 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----

Date: 19 May 93 17:57:49 GMT  
From: usc!sol.ctr.columbia.edu!news.kei.com!ub!dsinc!netnews.upenn.edu!  
mipg.upenn.edu!yee@network.UCSD.EDU  
Subject: 3rd Party Vendors of HT batteries  
To: info-hams@ucsd.edu

>My internal pack seems to have a dead cell, does  
>anyone have any recommendations of 3rd party vendors  
>for internal 3sat 7.2V packs?

I would like to extend this question. What about recommendations for  
3rd party vendors of battery packs in general?

--

411 Blockley Hall | Conway Yee, N2JWQ  
418 Service Drive | yee@ming.mipg.upenn.edu (preferred)  
Philadelphia, PA 19104 | cy5@cunixa.cc.columbia.edu (forwarded to above)  
(215) 662-6780 |

-----  
Date: Wed, 19 May 1993 19:11:59 GMT  
From: sdd.hp.com!col.hp.com!news.dtc.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!  
news1.boi.hp.com!dave@network.UCSD.EDU  
Subject: Alinco DJ580 Gets HOT!!!  
To: info-hams@ucsd.edu

I've got a DJ580T HT that, when transmitting on medium or high power  
(12V operation) the unit gets very hot -- too hot to hold! Has anyone  
else experienced this? I'm wondering if something is wrong with the  
unit.

Thanks in advance,

Dave Fujii  
Boise Printer Division R&D Lab  
Hewlett Packard Co.  
(208) 396-4888  
dave@hpdmd48.boi.hp.com  
KBJSQJ

-----  
Date: 19 May 93 21:05:00 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!  
darwin.sura.net!news-feed-1.peachnet.edu!concert!duke!news.duke.edu!  
ee.egr.duke.edu!jbs@network.UCSD.EDU  
Subject: Alinco DJ580 Gets HOT!!!  
To: info-hams@ucsd.edu

In article <C7AFzz.G6K@boi.hp.com> dave@boi.hp.com (Dave Fujii) writes:  
>I've got a DJ580T HT that, when transmitting on medium or high power  
>(12V operation) the unit gets very hot -- too hot to hold! Has anyone  
>else experienced this? I'm wondering if something is wrong with the  
>unit.

That's the AQL (Automatic QSO Limiter) circuit activating.

But seriously, they all do that. It is a little annoying. The speaker/mike

comes in handy for defeating the AQL circuit.

-joe KD4LLV

--

    You spend the night  
    Like you were spending a dime  
        - Lyle Lovett

-----

Date: 19 May 93 15:47:27  
From: idacrd.ccr-p.ida.org!idacrd!n4hy@uunet.uu.net  
Subject: ARRL Bulletin 55 ARLB055  
To: info-hams@ucsd.edu

Not to mention AMSAT, TAPR, QCWA, and on and on and on.

Bob

--

-----  
Robert W. McGwier | n4hy@ccr-p.ida.org  
Center for Communications Research | Interests: amateur radio, astronomy, golf  
Princeton, N.J. 08520 | Asst Scoutmaster Troop 5700, Hightstown

-----

Date: Wed, 19 May 1993 19:23:30 GMT  
From: sdd.hp.com!col.hp.com!news.dtc.hp.com!srngenprp!alanb@network.UCSD.EDU  
Subject: Don't get ripped off by a G5RV  
To: info-hams@ucsd.edu

nuts2u::little (little@nuts2u.enet.dec.com) wrote:

: Simply applying a Smith chart to a 102' center fed piece of wire with a  
: 34' piece of 75 ohm twin lead, yields the following terminal impedances:  
    ^^^^^^

I think here's your error. It's supposed to be 300 ohm twin lead.

AL N1AL

-----

Date: Wed, 19 May 1993 19:19:33 GMT  
From: sdd.hp.com!col.hp.com!news.dtc.hp.com!srngenprp!alanb@network.UCSD.EDU  
Subject: Don't get ripped off by a G5RV  
To: info-hams@ucsd.edu

Bill Ralston (wtr@mitre.org) wrote:

: There is also loss in the antenna tuner as well - you don't have infinite Q  
: capacitors and inductors. I suspect that the antenna tuner is probably the  
: greatest source of loss in an untuned antenna system. I know my antenna  
: tuner gets pretty warm sometimes (and I \_always\_ run barefoot).

Excellent point. Most amateur tuners do not specify the insertion loss.  
Drake was one of the few that did. Most Drake tuners spec .5 dB.  
Assuming other brands are worse, tuner loss can be quite significant.

AL N1AL

-----

Date: Wed, 19 May 1993 16:48:10 GMT  
From: swrinde!gatech!emory!wa4mei!ke4zv!gary@network.UCSD.EDU  
Subject: Don't get ripped off by a G5RV  
To: info-hams@ucsd.edu

In article <1993May18.224626.18297@nntpd2.cxo.dec.com> little@nuts2u.enet.dec.com  
(nuts2u::little) writes:

>gary@ke4zv.uucp (Gary Coffman) writes:

>

>>In article <1993May17.214122.22853@nntpd2.cxo.dec.com>

little@nuts2u.enet.dec.com (nuts2u::little) >>

>

>True a low loss coax and high SWR aren't a cause for great concern, but

>let's look at specific examples in reference to the claim that the G5RV

>has low SWR.

>

>Simply applying a Smith chart to a 102' center fed piece of wire with a

>34' piece of 75 ohm twin lead, yields the following terminal impedances:

Every G5RV style antenna I've seen uses either 300 ohm or 450 ohm twin lead.  
I don't even recall seeing any 75 ohm open wire line. You might recalculate  
with that value.

>Or does the G5RV have some magical property that defies transmission line  
>theory?

Well let's see what you come up with with the revised open wire impedance.  
I use a tuner with mine, so I don't much care what the VSWR is as long as  
the line is low loss. I'd just use a flattop fed with open wire line if  
it weren't for the problems of routing the feeder across the yard and into  
the shack. I bury the coax. The only real performance loss I note over the  
tri-bander the wire antenna replaced is the lack of the steerable null off  
the back. Most signals on HF are too strong rather than too weak.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

-----

Date: 19 May 93 17:53:54 GMT

From: usc!sdd.hp.com!think.com!cass.ma02.bull.com!opl.com!psinntp!psinntp!arrl.org@network.UCSD.EDU

Subject: Don't get ripped off by a G5RV

To: info-hams@ucsd.edu

In rec.radio.amateur.misc, zateslo@geomag.gly.fsu.edu (Ted Zateslo) writes:

[deletions]

>know what compromises we live with. I \_don't\_ think that article  
>titles like "G5RV: Ripoff" help the learning process (unless we're  
>discussing something like the "Maxcom" device with the dummy load  
>inside).

\*QST\*'s review of the Maxcom [spelling?] speaks for itself, but we should be aware that other companies also sell essentially the same technology -- a dipole center-loaded by a resistor -- for commercial/military purposes. Pitched with the proper adjectives, such technology is appropriate technology if it's what the situation/contract calls for.

Think of it: You have operators manning frequency-agile point-to-point communication links. Their mandate allows them to run whatever transmitter power (within limits) they need to effect the necessary microvolts-per-meter field strength in their target area. They also need antenna simplicity and buffering to protect their radios from The Peakiness of Possible External Reality--peakiness like antenna feedpoint impedance, which varies with frequency, height above ground, proximity of other radiators, etc.

So they install a doublet loaded by a high-power resistors. Assuming that incoming signal strengths are sufficient to let their links succeed (the load resistor knocks down received signals, too, but many MF/HF radios are \*far\* more sensitive than they need to be), it's a golden fix, and entirely appropriate technology.

High efficiency is not \*always\* desirable; it generally needs tweaking and fussing, drifts in quality over time, and maybe be unrealistically device-

specific. Sometimes you just want to get useful communication with minimal hassle--yes, operation under Part 97 too. There's room for folks of every conceivable "energy level" in hamdom.

Regards/WJ1Z

David Newkirk, Senior Asst Tech Editor | voice: 203-666-1541 X280  
American Radio Relay League | fax: 203-665-7531  
225 Main St, Newington CT 06111 USA | net: dnewkirk@arrl.org

-----  
Date: Wed, 19 May 1993 20:55:12 GMT  
From: pa.dec.com!nntpd2.cxo.dec.com!nuts2u.enet.dec.com!little@decwrl.dec.com  
Subject: MININEC  
To: info-hams@ucsd.edu

Since there has been some interest around NEC 2 I thought I'd post a pointer to it. In FORTRAN it can be found at:

Host ucsd.edu

Location: /hamradio/nec  
FILE -r--r--r-- 2534 Jan 31 1992 nec-2.doc  
FILE -r--r--r-- 294119 Jan 31 1992 nec-2.f  
FILE -r--r--r-- 294131 Jan 28 1992 nec-2.f.image

Another version that is the FORTRAN converted to C is also available at:

Host ucsd.edu

Location: /hamradio/nec  
FILE -r--r--r-- 488191 Feb 29 1992 nec2.in.c.tar.Z

Good luck!

73,  
Todd  
N9MWB

-----  
Date: 19 May 93 16:35:24  
From: sdd.hp.com!saimiri.primite.wisc.edu!news.larc.nasa.gov!larry.larc.nasa.gov!  
partos@network.UCSD.EDU  
Subject: Mobile antenna mount question

To: info-hams@ucsd.edu

I made a mount to attach to my window. Start with a piece of sheet aluminum or stainless about 1.5"x5", drill a hole for a bulkhead BNC connector, give it a right angle bend and then a u bend to fit over the glass. Seems to work fine. Or, if you want to make the antenna, too, use a BNC/SO-239 adapter and push a piece of brass rod into the SO-239 end.

|||||

--

```
|-----|
| Richard D. Partos      Norfolk, VA      |
| Internet: r.d.partos@larc.nasa.gov      |
|-----| |
```

-----  
Date: 19 May 1993 21:00:27 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!  
europa.eng.gtefsd.com!slc20!wwhitby@network.UCSD.EDU  
Subject: Radio Shack 70cm HT?  
To: info-hams@ucsd.edu

What is Radio Shack's position on selling ham equipment to non-licensees? I am studying for my technician class license right now and would love to purchase their 2m HT that they have on sale so I can save some \$\$\$\$ (yes, I know I couldn't use it until I got my license.)

Warren Whitby

-----  
Date: 19 May 93 16:32:13  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!  
zaphod.mps.ohio-state.edu!rphroy!link.ph.gmr.com!vbreault@network.UCSD.EDU  
Subject: Radio Shack 70cm HT?  
To: info-hams@ucsd.edu

In article <930518.224343.5e4.rusnews.w165w@garlic.sbs.com> system@garlic.sbs.com (Tony Pelliccio) writes:

William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes:

>>I wonder how much longer it'll be before they put out a dual-bander and  
>>a mobile. Obviously they're realizing that there's some money to be made  
>>on amateur gear. Can you imagine an HF rig from Radio Shack? Kind of

>>scary really.  
>>Tony  
>  
> scary?  
>  
> don't know why. it would probably be a good thing to get reasonably good  
> communications grade equipment out in the public view for them to see. maybe

The problem is, alot of Radio Shacks will sell to anyone. And that's what caused the demise of 2m in certain areas of the country.

Tony

IMHO.... Amateur radio is a great hobby with many interesting facets. It lacks, however, a strong political position and the price of new equipment is higher than it would be if it were massively marketed.

Selling amateur radio equipment and study guides through national chains like Radio Shack can address both of those concerns.

When the hobby is presented in a mainstream atmosphere it becomes viewed as a mainstream hobby, not some kind of thing that fat, balding, middle aged white men do in their basements late at night. When (if) it becomes viewed as a mainstream hobby then more people will join as responsible licensed amateur operators. More people == more political clout.

Think back a few years to the 60's when environmentalists were viewed as "crackpots". Slowly, their numbers grew until they became viewed as a mainstream group. Today... well, you can't even drain a marsh without doing an environmental study and every politician is well aware of the power of the environmentalists. If you have children in elementary school I'd be willing to bet that they have had at least one environmental sensitivity project this year. Mine have.... and have done so every year for several years now.

Hmmm.... Amateur radio was around half a century before the environmental movement was even thought about, yet we still don't have any political clout. (Okay, strictly speaking we have SOME political clout, but possibly not enough to maintain our current allocations in the face of large amounts of money from commercial concerns. Cripe! it's not even enough to get the FCC a decent computer system for the license database.)

The second point is rather self serving... I'd really like to be able to do some nifty things on the radio but time prevents me from scrounging or building the equipment myself and finances prevent me from buying it new. I'd really like to see the power of mass marketing drive the prices down and bring the quality up.



You are concerned that mass marketing amateur radio equipment will pollute the airwaves with unlicensed barbarians. I agree. It probably would happen. Cripe! Even with the current state of affairs, the bands are polluted with barbarians, both licenced and not. However, remember this: We used to have severe water and air pollution problems too. But that was before the environmentalists cultivated some political clout. There are still some places that are not compliant, it's true, but they are becoming closer to compliance and fewer in numbers.

Oh, a technical note: Radio Shack sales people are taught that they could personally be on legally thin ice if they were to sell amateur radio equipment to unlicensed people. You and I know that it's perfectly legal to sell amateur radio equipment (save possibly amplifiers) to ANYONE, but the RS training program teaches otherwise. I'm pretty sure that no other major amateur radio supplier has the same philosophy.

I work part-time at RS 01-6358 in Center Line, Michigan.

--

Val Breault - N8OEF - vbreault@gmr.com \ /|  
Instrumentation dept GM NAO R&D Center \ / |  
My opinions are not necessarily those of \ /\_\_|  
GMR nor of the General Motors Corporation \ / |\_\_\_

-----

Date: Wed, 19 May 1993 20:07:04 GMT  
From: usc!howland.reston.ans.net!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!  
news.kei.com!ub!dsinc!gvls1!rossi@network.UCSD.EDU  
Subject: Signal report etiquette  
To: info-hams@ucsd.edu

In article <1993May19.172131.19136@nnnnpd2.cxo.dec.com> little@nuts2u.enet.dec.com  
(nuts2u::little) writes:

>jbs@ee.egr.duke.edu (Joe B. Simpson) writes:

>

>>Oops. Am I breaking some sort of unwritten ham law? I just sent out my first  
>>8 QSL cards, and only one of them had "5x9" noted. Most of the rest were  
>>around 3x1. Will this insult the recipients? Guidance appreciated; I'm new  
>>to HF.

>

>That's a great question. I always feel a tinge of guilt when I give out a  
>signal report worse than the one I receive since I have a very modest  
>station. Reports on the satelllites and VHF/UHF seem to be realistic, but  
>on HF there seems to be a tendency to give 59 if the contact can be  
>completed. This isn't always the case and I've heard ops give consistent  
>59s with a 52 interspersed but nothing in between. What's the scoop?

I don't pay much attention to signal reports. Either you work the guy or you don't. I am not about to start making critical antenna adjustments just because I start getting a lot of 5x5 or 5x3 report. Likewise a string of 5x9 reports does not necessarily mean everything is perfect and couldn't be better.

If I get on and fill up a log page in an evening then I say the band must be open and I must be putting out a decent signal. If the log page is empty the the band is dead or my antenna fell down :-)

=====

Pete Rossi - WA3NNA

rossi@VFL.Paramax.COM

Paramax Systems Corporation - a Unisys Company  
Valley Forge Engineering Center - Paoli, Pennsylvania

=====

-----

Date: 19 May 93 20:23:21 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: SPECTRUM COMMUNICATIONS. NORRISTOWN PA  
To: info-hams@ucsd.edu

Has anyone recently ordered anything from these people?

I placed an order for an SCT110 2 meter transmitter the first week in February and still haven't received it. Phone calls to these people are of no help. They keep telling me it should ship next week or two. Their order form says 6-7 weeks for delivery. It has now been 15 weeks.

Is anyone else having trouble with this outfit?

73 de WB1FLD  
bourque@sceng.ub.com

-----

Date: 19 May 93 16:21:00  
From: sdd.hp.com!ux1.cso.uiuc.edu!howland.reston.ans.net!darwin.sura.net!  
news.larc.nasa.gov!larry.larc.nasa.gov!partos@network.UCSD.EDU  
Subject: Still 8 weeks for license  
To: info-hams@ucsd.edu

> Sad to say I'm still waiting after 9+ weeks. I called the FCC only to

It finally came! (10weeks, 2 days). I have heard some people say they got them in as little as 4 weeks, don't know what the determining factors are. Dick (KE4AZJ)

--

```
|-----|
| Richard D. Partos      Norfolk, VA |
| Internet: r.d.partos@larc.nasa.gov |
|-----|
```

-----  
Date: Wed, 19 May 1993 16:54:50 GMT  
From: swrinde!emory!wa4mei!ke4zv!gary@network.UCSD.EDU  
Subject: What is circular polarization?  
To: info-hams@ucsd.edu

In article <1476@arrl.org> zlau@arrl.org (Zack Lau) writes:  
>In rec.radio.amateur.misc, jbromley@joshua.intel.com (James Bromley~) writes:  
>>

>>They may look like verticals, put they are really large pipes about a  
>>wavelength in circumference with vertical slots cut into them.  
>>Vertical slots radiate horizontally polarized waves (natch). The  
>>slots are excited through capacitors from a second pipe inside the  
>>first that acts as the inner conductor of a giant coaxial cable and  
>>is fed from the bottom of the antenna. The slots all radiate in  
>>phase and produce a fair amount of gain, particularly at UHF.

>  
>I'm surprised they actually make a coaxial cable. I would have thought  
>they would just cut slots in a piece of waveguide. Waveguide normally  
>has the advantage of much lower loss. Page 308 of the 1991 Microwave  
>update shows how to build one out of WR-75 10 GHz waveguide. I've built  
>the WR-90 version in the 1989 Microwave update, p 190-191, but don't know  
>how it works yet... At least one has been used in Texas for mobile 10 GHz  
>SSB. I also seem to recall Chuck, WB6IGP selling them.

The reason is wind loading. At FM and VHF TV frequencies, a waveguide in TEM mode would be a yard in diameter instead of 6 1/8 inches. With a 80 foot tall antenna on a 1000 foot tower, that's a lot of moment arm to have hanging out in the breeze.

Gary

--

```
Gary Coffman KE4ZV      | You make it,      | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it.    | uunet!rsiatl!ke4zv!gary
534 Shannon Way         | Guaranteed!     | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244  |                  |
```

-----  
Date: 19 May 1993 19:33:35 GMT  
From: usc!howland.reston.ans.net!darwin.sura.net!news.larc.nasa.gov!  
grissom.larc.nasa.gov!kludge@network.UCSD.EDU  
Subject: What is circular polarization?  
To: info-hams@ucsd.edu

In article <1993May19.165450.20420@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman) writes:

>  
>The reason is wind loading. At FM and VHF TV frequencies, a waveguide in  
>TEM mode would be a yard in diameter instead of 6 1/8 inches. With a  
>80 foot tall antenna on a 1000 foot tower, that's a lot of moment arm  
>to have hanging out in the breeze.

Actually, I am ashamed to say that I did construct such a thing as an engineer at a small, low-power FM station in Atlanta. It was not a good idea, although the waveguides fabricated from trash cans welded together were rather ingenious. The difficulty was that the shifts in dimensions caused by soft breezes were enough to completely change the antenna pattern...  
--scott

-----  
Date: 19 May 1993 20:55:23 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!usc!  
cs.utexas.edu!asuvax!chnews!joshua!jbromley@network.UCSD.EDU  
Subject: What is circular polarization?  
To: info-hams@ucsd.edu

>In article <1993May18.131516.20373@ultb.isc.rit.edu>  
cep4478@ultb.isc.rit.edu (C.E. Piggott ) writes:

>> What is an example of an omni-directional, circularly polarized antenna?

In article <737776085snx@llondel.demon.co.uk>  
dave@llondel.demon.co.uk replies:

>There is one which is fairly good at omni-directional circular - but I can't  
>remember the name of it at the moment :-(

It's called a Lindenblad antenna and it's a big favourite with the satellite troops hereabouts.

Jim, W5GYJ

-----  
End of Info-Hams Digest V93 #607

\*\*\*\*\*